



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,513	09/05/2003	Soren Eriksson	202-1416	8025
28415	7590	04/20/2006	EXAMINER	
PRICE, HENEVELD, COOPER, DEWITT & LITTON, LLP			GIBSON, ERIC M	
695 KENMOOR S.E.			ART UNIT	PAPER NUMBER
P. O. BOX 2567				3661
GRAND RAPIDS, MI 49501-2567				

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/656,513	ERIKSSON, SOREN	
	Examiner	Art Unit	
	Eric M. Gibson	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 02 February 2006.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

- 4) Claim(s) 1-20 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 05 September 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Dominke et al. (US005991669A).

Per claim 1, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein a suspension coordinator subsystem (suspension; figure 3) is at a lower hierarchical level.

Per claim 2, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein the upward signals include availabilities of the mode of operation (column 4, lines 28-30).

Per claims 3 and 4, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower

hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein there is a request – response relationship between the two levels (column 4, lines 14-33).

Per claims 5 and 6, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein signals of vehicle measurements are available to both levels (110, 112, 126, 128; figure 1).

Per claim 7, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein the upward signals include status of the lower level (column 4, lines 28-30).

Per claim 8, Dominke '669 teaches a vehicle control system including a vehicle motion control subsystem (vehicle movement; figure 3), a suspension coordinator subsystem (suspension; figure 3) at a lower hierarchical level, wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33).

Per claim 9, Dominke '669 teaches that the upward signals include availabilities of the mode of operation (column 4, lines 28-30).

Per claims 10 and 11, Dominke '669 teaches a request – response relationship between the two levels (column 4, lines 14-33).

Per claims 12 and 13, Dominke '669 teaches signals of vehicle measurements available to both levels (110, 112, 126, 128; figure 1).

Per claim 14, Dominke '669 teaches that the upward signals include status of the lower level (column 4, lines 28-30).

Per claim 15, Dominke '669 teaches a method of controlling a vehicle including a hierarchical control system communicating between an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33) wherein a suspension coordinator subsystem (suspension; figure 3) is at a lower hierarchical level.

Per claim 16, Dominke '669 teaches that the upward signals include availabilities of the mode of operation (column 4, lines 28-30).

Per claims 17 and 18, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein there is a request – response relationship between the two levels (column 4, lines 14-33).

Per claims 19, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein signals of vehicle measurements are available to both levels (110, 112, 126, 128; figure 1).

Per claim 20, Dominke '669 teaches a vehicle control configuration including a hierarchical control system with an upper (100, figure 1) and lower hierarchical level (106, 108, 124, 122, 120; figure 1), wherein downward signals include at least one request for a vehicle modification (demand allocation, figure 2) and upward signals include availabilities (column 4, lines 14-33), wherein the upward signals include status of the lower level (column 4, lines 28-30).

Response to Arguments

Applicant's arguments filed 2/2/2006 have been fully considered but they are not persuasive. Specifically, the relationship between the higher-level coordinator and the suspension subsystem as illustrated in figure 3 of the Dominke '669 reference shows a higher-lower hierarchical structure. The description of the interrelationship between the higher level and lower level system identifies that lower levels act as separate hierarchical subsystems with the systems under their control in the figure 3 relationship (see for example, column 6).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

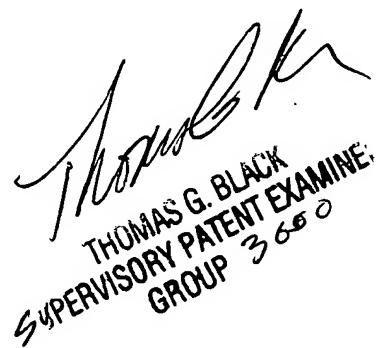
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M. Gibson whose telephone number is (571) 272-6960. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EMG



THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 3661